

**CLAIMS**

1. Method of managing services offered by communication equipments (Sk) of an Internet Protocol communication network (N), characterized in that it consists in reporting to communication equipments (Tk) that are situated in portions of said network (N) that have service selection means and in portions of said network (N) that have no service selection means services offered by the communication equipments (Sk) that belong to said network portions (N) that do not have service selection means.  
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- 10 2. Method according to claim 1, characterized in that service data representing that service is integrated into the address of said communication equipments (Sk) offering a service.
- 15 3. Method according to claim 2, characterized in that said addresses containing the service data are stored at least in said communication equipments (Tj) using said network layer protocol versions.
- 20 4. Method according to claim 3, characterized in that said addresses containing address data representing addresses of equipments that offer a service (Sk) and service data representing the service offered and said address data is stored in corresponding relationship to said service data.
- 25 5. Method according to either claim 3 or claim 4, characterized in that, if one of said communication equipments (Tj) wishes to access a selected service, the address data representing the address of the equipment (Sk) offering said selected service is determined in that communication equipment (Tj) in order to set up a connection therewith.
- 30 6. Method according to any one of claims 1 to 5, characterized in that said addresses containing said address data and said service data are broadcast in said network.
7. Method according to claim 6, characterized in that said addresses are broadcast in service messages.
- 35 8. Method according to any one of claims 1 to 7, characterized in that in the presence of two equipments (Sk, Sk') offering the same service in accordance with different network layer protocol versions, one of the two equipments (Sk) is selected as a function of its protocol version, after which a packet is generated and sent to said selected equipment (Sk) in

- the format of the selected version having a header containing at least the address data representing the destination address of the selected equipment (Sk).
9. Communication equipment (Tj) for an Internet Protocol communication network, characterized in that it comprises management means (MG) adapted, firstly, in the event of receiving address data representing an address of another equipment (Sk) belonging to a portion of said network (N) that has no service selection means and offers a service and service data representing said offered service, to store said received address data in a memory (M) in corresponding relationship to said service data received conjointly, and, secondly, in the event of a request to access a selected service, to determine in said memory (M) the address data representing the address of the equipment (Sk) that offers said designated service, in order to set up a connection therewith.
10. 10. Equipment according to claim 9, characterized in that said management means (MG) are adapted, in the event of determination in said memory (M) of two equipments (Sk, Sk') offering the same service in accordance with different network layer protocol versions, to select one of the two equipments (Sk) as a function of its protocol version and then to generate and send to said selected equipment (Sk) a packet with the format of the selected version and containing a header containing at least said address data representing the destination address of the selected equipment (Sk) in order to set up said connection therewith.
15. 11. Equipment according to either claim 9 or claim 10, characterized in that it is selected from a group comprising at least servers and communication terminals (Tj).
12. Service equipment (Sk) offering at least one service and belonging to a portion of an Internet Protocol communication network (N) that has no service selection means, characterized in that it comprises sender means (ME) adapted to broadcast messages containing address data representing their own address and service data representing said service offered in said network (N) to communication equipments (Tj) according to any one of claims 9 to 11.
20. 13. Equipment according to claim 12, characterized in that said sender

means (ME) are adapted to place said address data and said service data in the address field of the data packet header.

- 5      14. Equipment according to claim 13, characterized in that in the presence of an IPv6 type protocol format, said sender means (ME) are adapted to place said address data and said service data in the last 64 bits of the 128 bits of the IPv6 format address field, the first 64 bits of said 128 bits being dedicated to identifying the network portion and to the route for contacting said service equipment ( $S_k$ ) whose address is defined in the last 64 bits.
- 10     15. Equipment according to claim 14, characterized in that said sender means (ME) are adapted to place a first portion of the service data in six of said last 64 bits and a second portion of said service data and said address data in the remaining 58 bits of said last 64 bits, said first portion being dedicated to a type of service and said second portion being dedicated to a sub-type of said type of service.
- 15     16. Internet Protocol communication network, characterized in that it comprises communication equipments ( $T_j$ ) and service equipments ( $S_k$ ) according to any one of claims 9 to 15.